This document lists 2013 UTRAC Problem Statements that have been approved for FY2014 funding.

# 2013 UTRAC Approved Priority List



## **GROUP 1 Materials & Pavements**

Prob No.	Problem Title
13.01.02	Establishing Low Temperature Property Limits for Asphalt Mixtures
13.01.06	Correlation of Laboratory and Field Friction Measurements to Optimize Utilization of Bituminous Surface Aggregates
13.01.11	Cold-In-Place Recycling (CIR) Phase IV - Performance Mix Design

## **GROUP 2 Maintenance**

13.02.01	Compare Natural Colored PCCP to Darker Gray Colored PCCP for Snow Melt Potential
13.02.05	Development of Mobile Applications for UDOT Maintenance: Phase 2
13.02.06	Implementation of Aerial/Mobile Lidar Technology to Update Highway Feature Inventory
13.02.08	Maintenance Costs and Considerations during Geometric Design
13.02.09	Driving Cost Savings Using The Automatic Digital Device

# **GROUP 3 Traffic Management & Safety**

13.03.03	Characteristics of High Risk Intersections for Pedestrians and Cyclists - Part 2
13.03.11	Flashing Yellow Arrow Uses and Signage
13.03.16	Development of Performance Matrices for Evaluating Innovative Intersections and Interchanges
13.03.17	Calibration of Automatic Performance Measures Speed and Volume Data
13.03.19	I-15 Hot Lanes Study

## **GROUP 4 Geotechnical**

13.04.02	Probabilistic Liquefaction and Lateral Spread Hazard Mapping for Utah County
13.04.04	Evaluation of Finite Difference Approach to Estimating Consolidation Settlement
13.04.06	Effect of Pile Head Geometry on Lateral Resistance
13.04.07	Simplified SPT Performance-Based Assessment of Liquefaction and Effects

## **GROUP 5 Preconstruction**

13.05.02	Improving UDOT Program Management Business Dynamics
13.05.03	Tacit Knowledge Management
13.05.05	Knowledge Management by Peer Exchange

# **GROUP 6 Planning & Asset Management**

13.06.02	Asset Management 5-yr Plan
13.06.03	Understanding UDOT's Role in Utah's Air Quality Challenges
13.06.04	Algorithm Development for QA/QC of Asset Management Data and Forecasting of Sign Deterioration
13.06.06	SMA Friction Values

## **GROUP 7 Transportation Innovation**

13.07.03	Precast Concrete Pavements for Urban Intersection Reconstruction
	Digital Construction Site
	Laser Striping
	Modular Embankment